DETAILED ACTION

Notice to Applicant

1.   The following is a non-final office action. In response to the Election/Restrictions

requirement of 8/29/08, Applicant elected, with traverse, claims 50–55 for examination. Of

pending claims 16–38 and 43–55, 16–38 and 49–55 are withdrawn at this time, and claims 50–55

have been examined and stand rejected as discussed below.

Election/Restrictions

2.   Applicant's election with traverse of the restriction dated 8/29/08 in the reply filed on

9/29/08 is acknowledged. The traversal is on the ground(s) that (1) Two-way distinctness has

not been proven; (2) Serious burden has not been proven; and (3) Related processes is more

applicable than combination/subcombination. This is not found persuasive for the following

reasons.

3.   With respect to argument (1), Applicant is correct in that two-way distinctness is

necessary for combination-subcombination restriction justification. However, here, the Examiner

has restricted the two inventions at issue as *subcombinations usable together*, not as combination

and subcombination, and as such, "[t]wo or more claimed subcombinations, disclosed as usable

together in a single combination, and which can be shown to be separately usable, are usually

restrictable when the subcombinations do not overlap in scope and are not obvious variants".

MPEP 806.05(d). Regarding the passage cited by Applicant in its traversal, the two-way

distinctness test recited by Applicant applies when "applicant separately claims plural

subcombinations usable together in a single combination <u>and</u> claims a combination that

requires the particulars of at least one of said subcombinations . . . ." *Id*. Here, Applicant has not

claimed the combination and thus the two-way distinctness test need not be met.

4.   With respect to argument (2), Examiner offers the following additional rationale as to

why a serious search and examination burden exists with respect to the two inventions at issue:

As currently claimed, rescaling and rematching are distinct processes in the forecasting of a new

product's sales history. Breaking down the restricted inventions, both inventions essentially match the new product to an existing product to form a cloned or synthetic sales history, and then select a scaling factor for the new product. However, the last step of independent claim 43 uniquely comprises rescaling the synthetic sales history as a result of analyzing per-location sales of a new good. In contrast, independent claim 50 does not perform rescaling, rather it alternatively and uniquely rematches the new product to another existing product based on the accumulated sales history for the new product. The rematching step, as currently claimed, involves further examination of the available existing product histories as well as selection of a different product than that which was originally selected. These are distinct characteristics which are not required in a rescaling effort, which, unlike claim 50, could be accomplished for example by adjusting, up or down, the significance of existing weights, ratios, or factors in light of initial and recent sales history for the new product. Although Applicant is correct in positing that the majority of the steps of the two inventions are the same, Applicant's divergent claiming of the rescaling and rematching features places a significant burden on the Examiner's search in that even though the inventions may fall within the same class/subclass, each the features will singularly require significant time to search because although it may be common to match and scale in developing a new product sales history, such is not the case with respect to rematching and/or rescaling, which each have their own identity in the scheme of sales forecasting. Additional search time via the employment of expanded and different search queries would be necessary to account for each of these features which would not exist if just one were claimed. Moreover, not only does the Examiner have to search class and subclass in the patent databases, there are numerous non patent literature electronic resource databases, accessible using tools

such as DIALOG, Proquest, NEXIS, Google, etc., which are required of the examiner in a search

prior to any patentability determination, further adding to the Examiner's overall search duration.

5.   With respect to argument (3), Applicant has mistaken the restriction as one of

combination-subcombination instead of subcombinations usable together. Group 1 is not a

subcombination of Group 2, they are distinct subcombinations that are usable together.

Furthermore, Applicant's argument (3) posits that the two independent claims are related

processes and ostensibly provides what it believes to be the proper test for restriction. However,

Applicant makes no explicit statement whether its claims are or are not restrictable under the

'related processes' analysis. In response, in the event Applicant feels that the claims should be

categorized as related processes but are still not restrictable, a submission in writing indicating

that the inventions are obvious variants over each other would warrant reconsideration as to

removal of the restriction.

6.   The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

8.   Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

9.   Specifically, with respect to claim 51, it is indefinite as to how long the steps must be

repeated, because determination of sufficient history to discontinue the synthetic history is

significantly subjective in nature. For examination purposes, the Examiner assumes that one

repetition is sufficient and has applied such interpretation in his rejection below.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

11.   Claims 50, 52–53, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Reinmuth, *Forecasting the Impact of New Product Introduction*, Academy of Marketing Science,

Vol. 2, No. 2, Spring 1974, pg. 391–400, in view of Beyer et al., U.S. Pat. No. 6,978,249

[hereinafter Beyer].

12.   As per claim 50, Reinmuth teaches a method of generating and improving a synthetic,

per-location sales history for a new good that lacks a history of sales, that can be substituted for

an actual sales history until an actual sales history has accumulated, the method including:

       receiving an identifier of a new good (pg. 395, "Suppose in early 1972, they introduced a

coandy-coated breakfast food called Sugarloops");

       selecting a candidate good that has a sales history ("A certain record of sales was

observed over 1972 that the company wishes to use as an analogy for the expected dales over

1974 of a similar product they will call Oates");

       associating the sales history of the candidate good with the new good, thereby creating a

synthetic sales history (*id.*, "This approach assumes that there exist similar products that have

preceded our product in time and that we can use the sales history of the previous product to

gauge the success of ours");

selecting a first modification factor for the new good, wherein the modification factor

applies to at least part of the synthetic sales history to increase or decrease quantities of goods

sold during periods of the synthetic sales history (*id.*, "One must consider similarities of

economic conditions, market conditions, competitive factors, and the psychology of buyer

behavior. . . . Some factors will be somewhat different as the new product is now competing with

Sugarloops which was *not* an established competitor on the market in 1972. Perhaps subtle

changes like the higher price of milk in 1974 than in 1972 has caused buyers to disregard

breakfast foods requiring milk in favor of a breakfast of fruit and toast or eggs. Once the factors

which have been changes have been identified, the historical data must be modified to

accommodate the influence of the changing environmental conditions.").

Reinmuth does teach comparing characteristics of a new good to the characteristics of

candidate goods to find a candidate match (*see* discussion *supra*), but does not repeat such a

comparison given the presence of new good sales data, as claimed by Applicant.

Beyer, in the analogous art of new product demand forecasting, teaches a computer-

implemented product demand forecasting system that has a database with the requisite

functionality to store data and have data collected therefrom wherein the data pertains to

historical records about new and existing goods (Beyer, Fig. 1; col. 3, lines 27–36; col. 4, lines

11–16) and comprises the initial comparison discussed above as well, wherein data about a new

good is submitted and the profile extractor determines similar products based on a comparison

between the new good data and existing goods data (Beyer, col. 4, lines 2–4). Beyer also teaches

receiving and storing reports of demand for similar products (Fig. 4, ref. 71; col. 2, lines 55–61)

as well as creating data records for the new good once the good has been introduced (Fig. 5, Data

of the new product received?; col. 9, lines 49–54; col. 4, lines 15–16; col. 5, lines 27–30); and

revising and updating the forecast after receiving the new good demand data, replacing the old

estimate with the new better match estimate (Fig. 1, ref. 13, Updating Module; Fig. 5, ref. 84,

col. 9, line 49–54; Fig. 6, Updating Process, col. 5, lines 25–43; col. 9, line 66—col. 10, line 30,

detailing the updating process). It is noted that even though the good demand data of Beyer is not

explicitly sales data, Beyer teaches that demand data is derived from sales data (col. 1, lines 55–

56). Therefore, even if product sales data is considered to be different from product demand data,

it is at least readily calculable from its derivative demand data and therefore would have been

obvious to one having ordinary skill in the art at the time of the invention for the benefit of

clearer insight as to the behavior of customers coming from examining a purer form of data.

Moreover, collecting sales data for products is taught by Beyer (*see* discussion *supra*). Sales

histories of the new good and existing similar goods are known as evidenced by Beyer; the

comparison between new and existing goods technique is known; and the revision and update of

a goods strategy upon receipt of new data, causing replacement with a better match, is also

known. Finally, repeating the comparison between new good and candidate goods is considered

to be the equivalent of duplicating a part for multiple effect. Mere duplication of parts has no

patentable significance unless new and unexpected result is produced. See *St. Regis Paper Co. v.

Bemis Co.*, 193 USPQ 8, 11; 549 F2d 833 (7th Cir. 1977); *In re Harza*, 124 USPQ 378 (CCPA

1960)).

Thus, applying the known comparison and replacement techniques to the known elements of new good data and similar goods data would have been obvious to one having ordinary skill in the art at the time of the invention to achieve a predictable result and result in an improved system that selects a more suitable product to clone, thus providing a more accurate forecast and leading to increased operational efficiency and productivity.

Additionally, as discussed above, Reinmuth teaches a modification factor, but does not explicitly teach a scaling factor, because with respect to the modification of Reinmuth, the alteration or adjustment was not explicitly made (1) according to a standard, (2) by degrees, or (3) in calculated amounts. However, Beyer teaches the concept of scaling in at least this respect (col. 2, lines 50–67; col. 4, lines 50–65; col. 9, lines 55–65).With respect to the scaling versus modification aspect of the claim, because each individual element and its function are shown in the prior art, albeit in different references or embodiments, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself—that is in the substitution of scaling factor of Beyer for the modification factor of Reinmuth. Thus, the simple substitution of one known element for another producing a predictable result renders this aspect of the claim obvious.

Also, regarding the sales data being per-location, the descriptor 'per-location' is merely nonfunctional descriptive material and does not functionally enhance or diminish the invention as currently claimed. The type of data, without positive functional recitation as to its distinctive use, amounts to mere labeling of data and does not functionally alter the method of identifying similar users. See MPEP 2106.01 [R-5]. Nonfunctional descriptive material cannot lend patentability to an invention that would otherwise have been anticipated by the prior art. When

descriptive material is not functionally related to the substrate, the descriptive material will not

distinguish the invention from the prior art in terms of patentability (*see In re Gulack*, 703 F.2d

1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031

(Fed. Cir. 1994)).

Finally, it would have been obvious to one of ordinary skill in the art to modify Reinmuth

to include the teaching of Beyer because the claimed invention is merely a combination of old

elements, and in the combination each element merely would have performed the same function

as it did separately, and one of ordinary skill in the art would have recognized that the results of

the combination were predictable.

13.   As per claim 52, Reinmuth in view of Beyer does not explicitly teach wherein the

synthetic sales history is cloned from the candidate good by copying the per-location sales

history of the candidate good into the history database record for the new good. However,

Official Notice is taken that copying data and moving it from one file location to another was old

and well known in the art at the time of the invention, providing the benefits of better

organization and greater flexibility with respect to data movement.

14.   As per claim 53, Reinmuth does not explicitly teach the claimed limitation. Beyer teaches

storing data records in a database (*see* discussion *supra* ¶ 12) but does not explicitly teach the

limitation as claimed. However, Official Notice is taken that storing a file link or reference in

another file was old and well known in the art at the time of the invention. It would have been

obvious to one having ordinary skill in the art at the time of the invention to modify Reinmuth in

view of Beyer to include this limitation for the benefit of better understanding of the connection

between new and existing goods on the part of a user who is examining the file directory, thus

saving a user time.

15.   As per claim 55, Reinmuth does not explicitly teach an automated system that does not

require user interaction. Beyer does teach such functionality as described above (*see* discussion

supra ¶ 12, especially col. 4, lines 1–4, where the user does not make selection, rather the profile

extractor automatically performs the function.). Applying a known technique to a known device

ready for improvement would have been obvious so as to achieve a predictable result and result

in an improved system. Furthermore, merely providing known automatic means to replace a

manual activity which accomplishes the same result is not sufficient to distinguish over the prior

art. *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). It would have been

obvious to a person of ordinary skill in the art at the time of the invention to include exclusive

performance of steps by a computer because the above components of a computer system

facilitate and expedite the analysis of a company's business processes.

16.   Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reinmuth,

Forecasting the Impact of New Product Introduction, Academy of Marketing Science, Vol. 2,

No. 2, Spring 1974, pg. 391–400, in view of Beyer et al., U.S. Pat. No. 6,978,249 [hereinafter

Beyer], as applied to claim 50 above, further in view of Fulcher, *A common vision*,

Manufacturing Systems, Vol. 16, No. 2, Feb. 1998, pg. 88–94 (online reprint pg. 1–4).

17.   As per claim 51, Reinmuth does not explicitly teach repetition of the steps of claim 50.

Beyer teaches repetition of steps with respect to its normalization process but does not explicitly

apply this repetition technique to the steps of claim 1 (col. 8, lines 40–52). Still, repeating known

steps for a finite period of time is considered to be the equivalent of duplicating a part for

multiple effect. Mere duplication of parts has no patentable significance unless new and

unexpected result is produced. See *In re Harza*, 124 USPQ 378 (CCPA 1960)). Furthermore, it is

indefinite as to how long the steps must be repeated, because determination of sufficient history

to discontinue the synthetic history is significantly subjective in nature. Thus, Examiner assumes

that one repetition is sufficient, and thus this would be obvious in view of the rationale provided

above to provide a more accurate and focused result that improves overall operational efficiency.

Even so, Fulcher teaches the concept of discontinuing use of existing forecast upon accumulation

of sufficient actual history (Fulcher, pg. 3, section directed toward new product demand, where

new product forecasts are based on those of similar, existing products, until sufficient actual

sales have been accumulated, at which point the forecast is revised and actual forecast is used.).

It would have been obvious to one of ordinary skill in the art to modify Reinmuth in view

of Beyer to include the teaching of Fulcher because the claimed invention is merely a

combination of old elements, and in the combination each element merely would have performed

the same function as it did separately, and one of ordinary skill in the art would have recognized

that the results of the combination were predictable.

18.   Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reinmuth,

Forecasting the Impact of New Product Introduction, Academy of Marketing Science, Vol. 2,

No. 2, Spring 1974, pg. 391–400, in view of Beyer et al., U.S. Pat. No. 6,978,249 [hereinafter

Beyer], as applied to claim 50 above, further in view of Huang et al., U.S. Pat. No. 5,953,707

[hereinafter Huang].

19.   As per claim 54, Reinmuth teaches wherein the sales history of the candidate good is

impacted by a plurality of causal events and further including accessing causal-event-

adjustments that correspond to impacts of the causal events and applying the causal-event-

adjustments to the sales history data to mitigate the impacts of the causal events on the synthetic

sales history (Reinmuth, pg. 395, "One must consider similarities of economic conditions,

market conditions, competitive factors, and the psychology of buyer behavior. . . . Some factors

will be somewhat different as the new product is now competing with Sugarloops which was *not*

an established competitor on the market in 1972. Perhaps subtle changes like **the higher price of**

milk in 1974 than in 1972 has caused buyers to disregard breakfast foods requiring milk in

favor of a breakfast of fruit and toast or eggs. **Once the factors which have been changes have**

been identified, the historical data must be modified to accommodate the influence of the

changing environmental conditions." (emphasis added)). Neither Reinmuth nor Beyer, teach

wherein data regarding the causal events is stored in a causal event calendar. However, Beyer

teaches storing data in a database as discussed above (*see* discussion *supra* ¶ 12) but does not

explicitly teach storage in an events calendar. Huang, in the analogous art of product demand

management, teaches this limitation (col. 21, line 65—col. 22, line 7; Fig. 58). It would have

been obvious to one having ordinary skill in the art at the time of the invention to modify

Reinmuth in view of Beyer to include the teaching of Huang for the benefit of better organization

and planning, leading to improved operational efficiency.

      Furthermore, it would have been obvious to one of ordinary skill in the art to modify

Reinmuth in view of Beyer to include the teaching of Huang because the claimed invention is

merely a combination of old elements, and in the combination each element merely would have

performed the same function as it did separately, and one of ordinary skill in the art would have

recognized that the results of the combination were predictable.

Response to Arguments

20.   Applicant's remarks with respect to newly filed claims have been considered. No

arguments over the prior art were included.

Conclusion

21.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

     A.   Safavi, *Choosing the right forecasting software and system*, The Journal of

Business Forecasting Systems and Methods, Vol. 19, No. 3, Fall 2000, pg. 6–11 (online reprint

pg. 1–6) (illustrating that forecasting software for forecasting new product demand with little or

no history by using the demand of similar products was available prior to the filing of

Applicant's invention)

     B.   Raju and Teotia, *An Evaluation of Market Penetration Forecasting

Methodologies for New Residential and Commercial Technologies*, U.S. Dept. Energy, Argonne

National Laboratory, May 1985, pg. 1–25 (especially, pg. 6, discussing Historical Analogy

theory)

     C.   Morely, *Set for a Splash*, Grocer, Apr. 3, 1999, pg. 28–29 (discussing new

product launch strategies, including creation of an initial sales index for a new product based on

similar previous launches with similar promotion price, distribution, and advertising, and using

said initial estimate during the first few weeks following a product's launch until the actual sales

are sufficiently built up.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN M. PATS whose telephone number is (571)270-1363. The examiner can normally be reached on Monday through Friday, 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Justin M Pats/
Examiner, Art Unit 3623

/Andre Boyce/
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